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## A REVIEW OF THE GENERA TRIPHLEBA RONDANI, PHORA LATREILLE AND ANEVRINA LIOY (DIPTERA, PHORIDAE) FROM RUSSIAN FAR EAST

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Nine species of the genus *Triphleba*, eight species of the genus *Phora* and four ones of *Anevrina* are recorded from Russian Far East. *T. geniculata* **sp. n.**, *T. seti-gera* **sp. n.**, *T. truncata* **sp. n.** and *A. capillata* **sp. n.** from Primorskii krai are described. Following synonyms are proposed: *Ph. parvisaltator* Goto, 1985 = *Ph. advena* Michailovskaya, 1986, **syn. n.**; *Ph. saigusai* Goto, 1986 = *Ph. maritima* Michailovskaya, 1986, **syn. n.** *T. distinguenda* (Strobl), *T. nudipalpis* (Becker), *Ph. edentata* Schmitz, *Ph. bullata* Schmitz, *A. thoracica* (Meigen) and *A. curvinervis* (Becker) are firstly recorded from Russia. Keys to the species of *Triphleba*, *Phora* and *Anevrina* from Russian Far East are given.

KEY WORDS: Phoridae, taxonomy, new species, distribution.

M. В. Михайловская. Обзор родов *Triphleba* Rondani, *Phora* Latreille и *Anevrina* Lioy (Diptera, Phoridae) Дальнего Востока России // Дальневосточный энтомолог. 1999. N 70. C. 1-16.

С Дальнего Востока указано 9 видов рода *Triphleba*, 8 видов *Phora* и 4 вида *Anevrina*. Из Приморского края описано 4 новых для науки вида: *T. geniculata* 

**sp. n.**, *T. setigera* **sp. n.**, *T. truncata* **sp. n.** и *A. capillata* **sp. n.** Установлена новая синонимия: *Ph. parvisaltator* Goto, 1985 = *Ph. advena* Michailovskaya, 1986, **syn. n.**; *Ph. saigusai* Goto, 1986 = *Ph. maritima* Michailovskaya, 1986, **syn. n.** Впервые для России указываются 6 видов: *T. distinguenda* (Strobl), *T. nudipalpis* (Becker), *Ph. edentata* Schmitz, *Ph. bullata* Schmitz, *A. thoracica* (Meigen) и *A. curvinervis* (Becker). Даны определительные таблицы дальневосточных видов родов *Triphleba*, *Phora* и *Anevrina*.

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#### INTRODUCTION

The genus Triphleba includes more than 90 species and widely distributed in all regions except Afrotropical one. The Palaearctic species are keyed by Schmitz (1943, 1955) and catalogued (55 species) by Disney (1991). Four species added to Palaearctic fauna by Goto & Takeno (1983), Michailovskaya (1986) and Disney (1987, 1994). Up to present four species of Triphleba recognized from Russian Far East (Michailovskaya 1986,1998). Three new species of Triphleba are described and two species are firstly recorded from Russia in current paper. Six species of the genus Phora reported from Russian Far East (Michailovskaya, 1986; 1998). During revisionary studies of *Phora* I have examined slide-mounted material of this genus. As a result new synonymies are established and two species firstly mentioned from Russia below. Twelve species of the genus Anevrina are known including three species recognized to Russia (Disney, 1991; Michailovskaya 1986). One new species is described and two species are firstly recorded from Russia in present paper. Holotypes and paratypes of the new species are deposited in the collection of the Institute of Biology and Pedology, Vladivostok, Russia. Following abbreviations are used for collectors: AL - A. Lelej, AO - A. Ozerov, MM - M. Michailovskaya, SS - S. Storozhenko.

## GENUS TRIPHLEBA RONDANI, 1856 Key to the species (males)

1. $R_{4+5}$ absent or with fork incomplete (the base of $R_{2+3}$ absent) (Fig.1). Antennal
segment 3 rounded. Legs uniformly colored, brown, fore legs yellowish brown.
Halteres brownish to black
$-R_{4+5}$ with fork complete $(R_{2+3}$ arises from $R_{4+5})$ (Figs 2, 3)
2. Process of left side of epandrium tapers to narrowly-rounded tip and with some
weak hairs only (Figs 25, 26)
- Processes of upper half of epandrium not tapers to tip and with very robust and long
bristles on lower margin (Figs 10, 11). Palps as Fig. 4
3. Scutellum with 2 pairs of bristles
- Scutellum with an anterior pair of short thin hairs (evidently shorter and thinner
than ones on scutum) and a posterior pair of bristles 6
2

4. Scutellar bristles unequal in length (anterior pair of hairs thinner and 1/3 shorter than posterior one). Antero-lateral bristles absent. Palps inflated and with one short bristle apically (Fig. 5). The anal tube below without a projection. Hypo-- Scutellum with 4 equal in length bristles. Antero-lateral bristles present. The anal 5. Left side of epandrium with process divided in two arms (Fig. 16). Hind tibia without bristle in upper half. Palp 2.5 times longer its width . . . . . . . T. opaca - Left side of epandrium with not divided process (Figs 14, 15). Hind tibia with bristle in upper half. Palp 3-3.5 times longer its width (Fig. 6) . . . . . . . . . . ..... T. geniculata sp. n. 6.  $A_1+CuA_2$  obscure apically and evidently not touching the wing margin (Figs 2, 3). 6 7.  $A_1+CuA_2$  about half way to wing margin. Halteres dark. Processes of epandrium  $-A_1+CuA_2$  about 3/4 way to wing margin. Halteres yellow. Palps as Fig. 7. Legs 8. Halteres brown to black. Palps not swollen, narrow (Fig. 8) Hypopygium as Figs - Halteres yellow. Palps swollen, at least as wide as antennal segment 3 and with a few short bristles except of longer terminal one (Fig. 9). Legs dark. Hypopygium 

#### *Triphleba brevicilia* Michailovskaya, 1986 Figs 7, 19, 20

REDESCRIPTION, MALE, Frons black without vestigial medial furrow and with about thirty hairs, 1.9 times as broad as long (0.39 x 0.21 mm). Supra-antennal and antennal bristles shorter than rest bristles on frons. Antero-lateral bristles absent. Second transverse row of bristles almost straight. Antennal segment 3 black, conical with dense hairs and dorsal arista. Hairs of distal half of arista not longer than width of base of segment 3 of arista. Palps black (length 0.14 mm) with 9-10 weak short hairs (Fig.7). Thorax black. Scutellum with 2 strong bristles. Three notopleural bristles. Abdomen with black tergites bearing fine hairs. Venter brownish gray, bare. Processes of epandrium subequal in length with weak bristles. Anal tube below without medial projection (Figs 19,20). Legs yellow to dark yellow, hind pair darkest. Fore tibia with one bristles in basal half. Mid tibia (erroneously fore tibia in original description) with two bristles. Hind tibia with one bristles in second third. Wings (2.21 x 0.98 mm). Index C 0.54. Costal ratios 2.6:1.5:1. Costal hairs 0.06 mm. One hair at base of  $R_{4+5}$ . A single axillary bristle. Costal section 2 and 3 broadens. Sc reaches  $R_1$ .  $R_{4+5}$  broadens gradually in middle.  $M_1$  at base S-forming.  $A_1+CuA_2$  not reaching to wing margin (only 3/4 of vein readily discerned). Halteres yellow. Length 2.9 mm. FEMALE unknown.

MATERIAL. Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 29.IV, 19.V 1981, 2\u03c3 (MM).

DISTRIBUTION. Russia: Primorskii krai.

REMARKS. Recently I mounted on slide the paratype of *T. brevicilla* (preserved before that in alcohol) and discovered some errors in original description (Michailovskaya, 1986).

## *Triphleba geniculata* Michilovskaya, sp. n. Figs 3, 6, 14, 15

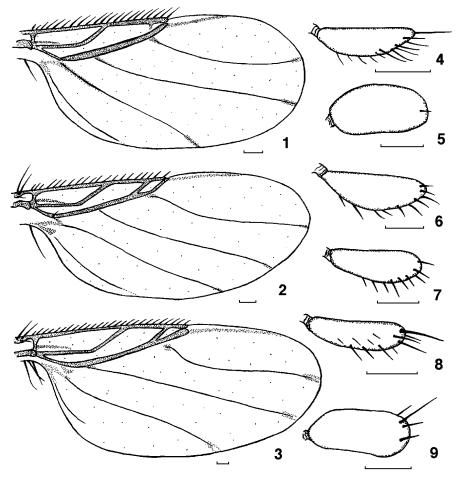
DESCRIPTION. MALE. Frons dark brown and more 2 times as broad as long (0.41 x 0.18 mm) with about twenty hairs. Medial furrow absent. One pair supraantennal bristles, clearly shorter than rest bristles on frons. Antero-lateral bristles little higher than antials and first transverse row of the bristles slightly convex forward. Second transverse row of the bristles less convex forward almost straight. Antennal segment 3 rounded (0.22 mm), black with long hairs and subapical arista. Hairs of arista in distal half longer than maximum basal width of segment 3 of arista. Palps dusky brown, obviously elongate, 3 times as long as broad (0.27 x 0.085 mm) with 9-10 short bristles, which regular place on lower margin of palps, and clearly shorter than breadth of palps (Fig. 6). Thorax black. Each side of scutum with 4 notopleural bristles. Scutellum with 2 pairs of subequal bristles. Abdomen with broad and short black terga, covered by very fine hairs. Anterior part of terga II-VI with granulate region. Venter grayish brown, bare. Hypopygium black, rounded with unequal process. Process of right side of epandrium shorter than process of left side and bearing short hairs (Fig. 14). Process of left side of epandrium elongate, knee-like forming, slightly broaden to tip and with bristles (Fig. 15). There is a projection below the anal tube. Legs dark brown to black, fore legs more light. Fore tibia without isolated bristles. Mid tibia with pair unequal bristles in basal half. Hind tibia with distinct bristles in basal half. Tarsal segment 5 of fore and mid legs weakly widened and ovate. Wings (2.3 x 1.1 mm) (Fig. 3). Costal index 0.51. Costal ratios 4.1:1.6:1.  $R_{4+5}$  forked. Costal cilia 0.06 mm. A small bristle at base of  $R_{4+5}$  shorter than costal cilia. 3 bristles on axillary ridge. Costa a little thickens in last third. Membrane yellowish gray. Thick veins brown. Sc reaches vein 2.  $A_1+CuA_2$  obscure and not reaching half way to wing margin. Halteres with dark knob. Length 3 mm. FEMALE unknown.

MATERIAL. Holotype –  $\sigma$ , Russia, Primorskii krai, 18 km SE Ussuryisk Gornotayozhnoe, 30.IV 1996 (MM).

DISTRIBUTION. Russia: Primorskii krai.

ETYMOLOGY. The names refers to the form of the process of epandrium.

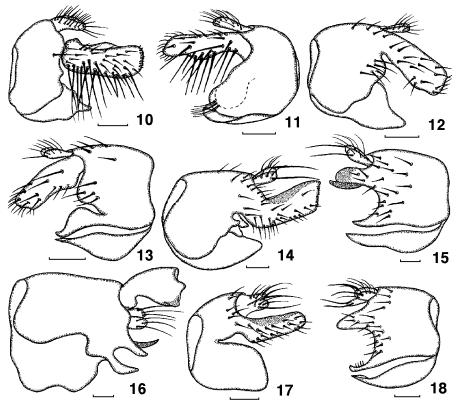
REMARKS. In Schmitz (1943) *T. geniculata* runs to couplet 7. It is easily distinguished from *T. trinervis* (Becker, 1901) by more longer and unequal of the processes of epandrium. It differs from *T. collini* Schmitz, 1943 by a projection below the anal tube and by unequal processes also.



Figs 1-9. *Triphleba*. 1-3) wings of male: 1) *T. setigera* sp. n., 2) *T. truncata* sp. n., 3) *T. geniculata* sp. n.; 4-9) palps of male: 4) *T. setigera* sp. n., 5) *T. truncata* sp. n., 6) *T. geniculata* sp. n., 7) *T. brevicilia*, 8) *T. distinguenda*, 9) *T. nudipalpis*. Scale line = 0.1 mm.

# $\it Triphleba setigera$ Michailovskaya sp. n. Figs 1, 4, 10, 11

DESCRIPTION. MALE. Frons black, little wider than length (0.27 x 0.24 mm) with about the forty hairs and without vestigial medial furrow. One pair small supra-antennal bristles. Antials bristles lower on the frons than antero-lateral ones. Supra-antennal and antero-lateral bristles subequal in length and shorter than rest of bristles on the frons. Medio-lateral bristles higher than pre-ocellars bristles and second transverse row of bristles on frons convex forward. Antennal segment 3 black,



Figs 10-18. *Triphleba*, hypopygium. 10, 11) *T. setigera* sp. n.; 12, 13) *T. truncata* sp. n.; 14, 15) *T. geniculata* sp. n.; 16) *T. opaca*; 17, 18) *T. renidens*; 10, 12, 14, 16, 17) left side; 11, 13, 15, 18) right side. Scale line=0.1 mm.

subglobose with subapical haired arista. Palps brown (0.16 x 0.04 mm) with six strong bristles (one longest at apex) and with (4-5) weak hairs (Fig. 4). Thorax dark brown. Each side of scutum with three notopleural bristles. Scutellum with an anterior pair of hairs and posterior pair of robust bristles. Abdomen with brown terga bearing very fine, short hairs. Venter grayish with fields of hairs on segments III-VI. There are only a few hairs on segments III and IV, but they more numerous on segments V and VI. Hypopygium dark brown to black, lower part lights. Processes of upper half of epandrium subequal in length with conspicuously very strong and long bristles (0.15-0.17 mm). They considerable longer than greatest breadth of process (0.10-0.12 mm) (Figs 10,11). Left and right processes rounded on the posterior margin and with small spines. There is no projection below anal tube. Aedeagus with appendix bearing a tuft of hairs. Legs uniformly colored, brown. Fore tibia and all tarsi yellow brownish. Fore tibia without isolated bristles. Mid tibia with pair of bristles. Hind tibia with bristles about middle. All tarsal segments

long and slender. Wigs with membrane tinged yellow-brown (1.46 x 0.77 mm) (Fig. 1). Costal index 0.49. Costal ratios 6.2:2.8:1.  $R_{4+5}$  with fork incomplete (the base of  $R_{2+3}$  absent and it is not attached to  $R_{4+5}$ ). Costal cilia 0.1 mm. No hair at base of  $R_{4+5}$ . A single axillary bristle. Costa thickens a little from end of  $R_1$ .  $R_{4+5}$  broadens gradually, especially in middle. Sc not reaching and not fused  $R_{4+5}$ .  $A_1+CuA_2$  reached the wing margin. Halteres entirely dark brown. Length 2.6 mm. FEMALE unknown.

MATERIAL. Holotype – ♂, Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 28.V 1996 (MM).

DISTRIBUTION. Russia: Primorskii krai.

ETYMOLOGY. The name refers to the long bristles on epandrium processes.

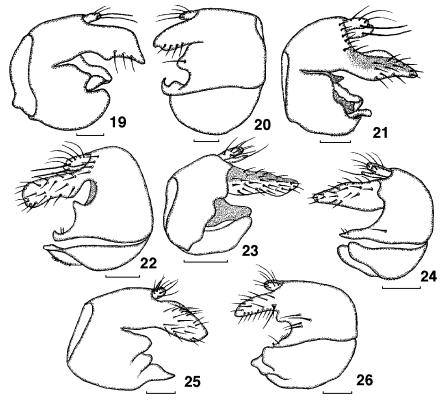
REMARKS. *T. setigera* runs to couplet 63 in Schmitz (1943) and to couplet 5 in Disney (1983). The new species is distinguished from *T. gracilis* (Wood, 1907) by uniform brown legs, by light grayish venter, by devoid of bristle on fore tibia and by conspicuously strong bristles on lower margin of the epandrium processes. The male of *T. setigera* easily differs from one of *T. crassinervis* (Strobl, 1910) by hypopygium shape.

## Triphleba truncata Michailovskaya sp. n.

Figs 2, 5, 12, 13

DESCRIPTION. MALE. From black little wider than length (0.27 x 0.21 mm) with thirty hairs and without medial furrow. One pair supra-antennal bristles. Antero-lateral bristles absent. Pre-ocellar a little higher on frons than medio-lateral. Antennal segment 3 globose with subapical arista. The hairs of distal half arista about the same length as segment 3 of arista or scarcely longer than basal width of segment 3 of arista. Palps black, very broadens (0.27 x 0.17 mm) with single short but robust bristles about apex (Fig. 5). Thorax black. Two notopleural bristles with each side. Scutellum with four bristles, anterior pair thinner and on 1/3 shorter than posterior pair. Abdomen with black terga with short hairs. Tergite VI with more longer and robust hairs. Venter gray without hairs. Hypopygium black. Processes in left and right side more or less equal in length and breadth (Figs 12, 13). There is no projection below anal tube. Legs dark black, tarsal segment brown. Fore tibia with strong bristle in upper half. Mid tibia with two equal bristles in basal half. Hind tibia with bristle in basal half. All tarsal segments not broaden. Wings (1.5 x 0.87 mm) (Fig. 2). Costal index 0.51. Costal ratios 3.7:2.1:1.  $R_{4+5}$  forked. Costal cilia 0.08 mm. Hair at base of  $R_{4+5}$  shorter than costal cilia. A single axillary bristle. Costa not thicken. Fork of  $R_{4+5}$  relatively large.  $M_I$ - $CuA_I$  pale gray.  $A_I$ + $CuA_2$  reaching to wing margin, but obscure at tip. Sc reaching  $R_I$ . Membrane yellow grayish tin. Halteres dusky brown. Length 1.9 mm. FEMALE unknown.

MATERIAL. Holotype – &, Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 1.V 1996 (MM); Paratype – the same locality, 1.V 1996, 1& (MM).



Figs 19-26. *Triphleba*, hypopygium. 19, 20) *T. brevicilia*; 21, 22) *T. distinguenda*; 23, 24) *T. nudipalpis*; 25, 26) *T. crassinervis*. 19, 21, 23, 25) left side; 20, 22, 24, 26) right side. Scale line=0.1 mm.

#### DISTRIBUTION. Russia: Primorskii krai.

ETYMOLOGY. The name refers to the absent antero-lateral bristles on frons.

REMARKS. *T. truncata* sp. n. runs to couplet 12 in Schmitz (1943) and to couplet 7 in Disney (1983). The new species easily distinct from *T. subcompleta* Schmitz, 1927 by absent antero-lateral bristles on frons, by having broader palps and by hypopygium shape. The male of *T. truncata* sp. n. runs to couplet 10 in Schmitz (1943) also if the scutellar bristles in *T. gralicis* (Wood, 1907) are treated as very unequal (in original description length of the anterior scutellar bristles unknown, because they are lost). New species is close to *T. gilvipes* Schmitz, 1943, but differs from the latter by lacking antero-lateral bristles on frons, by having more broader palps, by darker legs, by gray venter, by longer  $A_1+CuA_2$ , by costal index and by costal ratios. Lacking of antero-lateral bristles on frons is known in *T. admirabilis* Schmitz, 1927, *T. schistoceros* Goto et Takeno, 1983, *T. brevicilia* Michailovskaya, 1986 and *T. truncata* sp. n.

#### Triphleba opaca (Meigen, 1830)

Fig. 16

MATERIAL. Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 21.V 1981, 2 & (MM).

DISTRIBUTION. Russia, Primorskii krai, West Siberia, Northern European part of Russia. - Europe.

#### Triphleba renidens Schmitz, 1927

Figs 17,18

MATERIAL. Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 20.IV 1981, 26.IV, 20.V 1996, 6& (MM).

DISTRIBUTION. Russia: Primorskii krai, Kuril Islands (Ushishir), Northern European part of Russia. – Europe.

#### Triphleba distinguenda (Strobl, 1892)

Figs 8, 21, 22

MATERIAL. Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 27, 31.V, 25.VI 1996, 27.V 1997, 4♂ (MM).

DISTRIBUTION. Russia: Primorskii krai (new record). – Europe.

## Triphleba nudipalpis (Becker, 1901)

Figs 9, 23, 24

MATERIAL. Russia, Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 28.VI, 7.VII 1996, 8& (MM).

DISTRIBUTION. Russia: Primorskii krai (new record). – Europe.

## Triphleba crassinervis (Strobl, 1910)

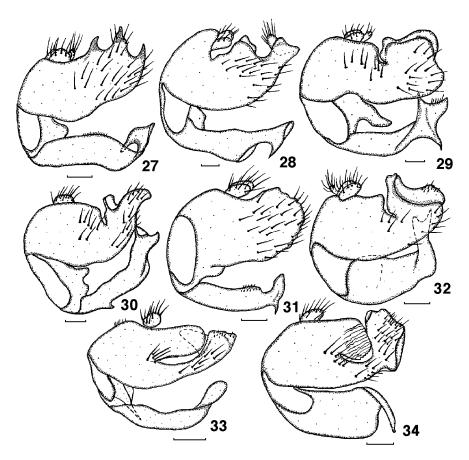
Figs 25, 26

MATERIAL. Russia, Kuril Islands, Iturup, 5 km N Reydovo 19.VIII 1996, 1 ♂ (AL)

DISTRIBUTION. Russia: Kuril Islands (Iturup). – Europe.

## GENUS *PHORA* LATREILLE, 1796 Key to the species (males)

1. Hind tibia with 2 anterior bristles in upper half. - Costal index: 0.46-0.47. Right surstylus spatulate; left surstylus with 3 pointed process (Fig. 27) . . *Ph. occidentata* – Hind tibia with only 1 anterior bristles in upper half . . . . . . . . . . . . . . . . . 2



Figs 27-34. *Phora*, hypopigium, lateral view. 27) *Ph. occidentata*; 28) *Ph. convergens*; 29) *Ph. saigusai*; 30) *Ph. nipponica*; 31) *Ph. parvisaltator*; 32) *Ph. bullata*; 33) *Ph. edentata*; 34) *Ph. holosericea*. Scale line=0.1 mm.

2. Mid tibia with 2 anterior bristles in the upper half. 1st costal sector shorter than 2nd (4.6:6.0). Right surstylus narrow, slender; left surstylus broad (Fig. 28)
– Mid tibia with 1 anterior bristles in the upper half
3. Frons ♂ conspicuously narrowed in dorsal half 4
– Frons ♂ at most only slightly narrowed in dorsal half or with parallel-sided 5
4. Right surstylus slender, to form a rectangular plate with parallel-sided in lateral
view; left surstylus broad (Fig. 29)
- Right surstylus gradually widened distally; left surstylus narrow beakforming
(Fig. 30)

#### Phora occidentata Malloch, 1912

Fig. 27

MATERIAL. Russia: Kuril Islands: Shumshu, Pochtareva Cape, 7.VII 1997, 1♂, 1♀ (AL, SS); Paramushir: Vasil'ev Peninsula, 3. VIII 1996, 1♂ (AL); Krasheninnikova Bay, 14.VIII 1997, 18♂ (AL, SS); Vasil'ev Bay, 16.VIII 1997 6♂, 1♀ (AL, SS); Antsyferova I., 15.VIII 1997, 5♂ (AL, SS); Makanrushi, 18. VIII 1997, 12♂ (AL, SS); Kharimkotan, 8.VIII 1996, 20♂ (AL); Amurskaya oblast: Zea Rever, 1,14.VII, 11.VIII 1982, 8♂ (AO).

DISTRIBUTION. Russia: Kamchatka, Kuril Islands, Amur.- Japan (Honshu), China (Sichuan), Europe (Finland, Sweden, Norway), U.S.A. (Alaska).

#### Phora convergens Schmitz, 1920

Fig. 28

MATERIAL. Russia: Kuril Islands: Iturup, Reidovo, 19.VIII 1996, 1 & (AL). DISTRIBUTION. Russia: Kuril Islands (Iturup).- Japan (Hokkaido, Honshu), China (Sichuan), Estonia, West Europe, North America.

#### Phora saigusai Goto, 1986

Fig. 29

Phora saigusai Goto, 1986: 128, fig. 1.

Phora maritima Michailovskaya, 1986: 431, figs. 8, 9, syn. n.

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 9.VIII 1983, 1 d (MM); Kedrovaya Pad, 16.VIII 1980, 1 d (MM); Amurskaya oblast, Zea Rever, 25.VIII 1981, 1 d (O. Gorbunov), the same locality, 22.VII 1982, 2 d (AO)

DISTRIBUTION. Russia: Primorskii krai, Amur. - Japan (Honshu, Shikoku, Kyushu), China (Yunnan).

NOTES. Comparision of the slide-mounted material of paratype of *Phora maritima* with description and drawing of *Ph. saigusai* showed them to be the same species.

#### Phora parvisaltator Goto, 1985

Fig. 31

Phora parvisaltator Goto, 1985: 547, fig. 1.

Phora advena Michailovskaya, 1986: 430, figs. 4, 5, syn. n.

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 16.IV, 19.VII 1983, 7, 18.VII, I9-11.IX 1996, 20& (MM).

DISTRIBUTION. Russia: Primorskii krai. - Japan (Hokkaido, Honshu, Kyushu).

NOTES. Comparision of the slide-mounted material of paratype of *Phora advena* with description and drawing of *Ph. parvisaltator* showed them to be the same species.

#### Phora edentata Schmitz, 1920

Fig. 33

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 3.VII 1996, 17.VII 1997, 2♂ (MM).

DISTRIBUTION. Russia: Primorskii krai (new record). - Japan (Hokkaido, Honshu), West Europe.

#### Phora holosericea Schmitz, 1920

Fig. 34

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 16.IV-6.IX 1980, 3-6, 25-28.VI, 7.VII 1996, 58 & (MM); Kuril Islands: Onekotan, Rezvyi strem, 7.VIII 1996, 1 & (AL); Onekotan, 9.VIII 1996, 1 & (AL); Ekarma, 10.VIII 1996, 1 & (AL); Amurskaya oblast, Zea Rever, 22.VII 1982, 2 & (AO).

DISTRIBUTION. Russia: Kuril Islands, Primorskii krai, Amurskaya oblast. - Japan (Hokkaido, Honshu, Kyushu), Korea, China (Heilongjiang, Shaanxi), Mongolia, Israel, Europe, U.S.A.

## Phora nipponica Goto, 1986

Fig. 30

MATERIAL. Russia, Kuril Islands: Shumshu, Bolshoe Lake 9.VIII 1997, 11 & (AL, SS); Paramushir, Vasil'ev Bay 16.VIII 1997, 3 & (AL, SS); Makanrushi, 18.VIII 1997, 1 & (AL, SS); Kharimkotan, 8.VIII 1996, 2 & (AL); Shiashkotan, 11-12. VIII 1996, 21 & (AL).

DISTRIBUTION. Russia: Kuril Islands. - Japan (Hokkaido, Honshu).

#### Phora bullata Schmitz, 1927

Fig. 32

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 13.VIII 1997, 23 (MM).

DISTRIBUTION. Russia: Primorskii krai (new record). - Japan (Hokkaido, Honshu, Kyushu), Europe.

## GENUS ANEVRINA LIOY, 1864 Key to the species (males)

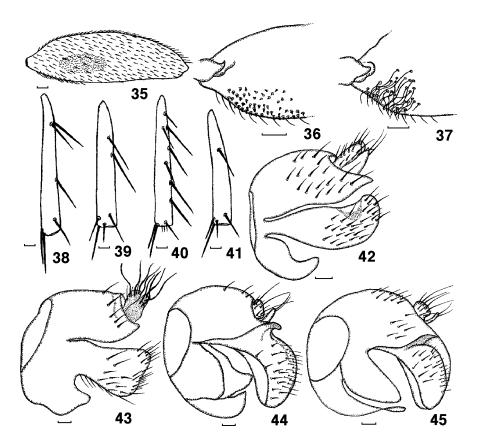
1. External face of hind femur with an oval patch of minute hairs in basal half (Fig
35). Legs yellowish. Hind tibia with four bristles (2ad and 2d) (Fig. 38)
Hypopygium as Fig. 42
- External face of hind femur without such patch. Legs brown to lack 2
2. Haltere dark brown or black. Inner face of hind femur with short black spine
(Fig. 36). Hind tibia with three bristles (2ad and 1d) (Fig. 39). Hypopygium a
Fig.43
- Haltere yellow or whitish
3. Inner face of hind femur in basal half with very long hairs (Fig. 37). Hind tibia
with seven or eight bristles (3ad and 4-5d) (Fig. 40). Hypopygium as Fig. 44
- Inner face of hind femur in basal half without such hairs. Hind tibia with two
bristles only (2ad) (Fig. 41). Hypopygium as Fig. 45

## Anevrina capillata Michailovskaya, sp. n.

Figs 37, 40, 44

DESTRIPTION. MALE. Body length 3.2-4.25 mm. Frons black, almost square. Third antennal segment subglobose, brown with dorsal arista. Palps dirty yellow, with 12 different bristles in apical half (five very strong and 6-7 more shorter) and hairs. Both transverse rows of bristles on frons convex forward. Thorax black. Three notopleural bristles. Scutellum with four bristles, anterior pair of bristles 1.5 times shorter than posterior one. Abdomen with brown terga and mainly short sparse hairs, margins of tergum VI longer and stronger. Terga II and VI clearly longer than other terga. Venter grey, bare. Hypopygium brown, as Fig. 44. Legs brown, tibia and tarsus lighter. Fore tibia with one long dorsal bristle about middle. Mid tibia with two bristles in upper third: dorsal and antero-dorsal; and one apical antero-dorsal plus two ventral spore. Hind tibia with 4-5 dorsal and 3 antero-dorsal bristles (Fig. 40). Inner face of hind femur with 20-30 very long (0.23 mm) hairs (Fig. 37). Wing length 2.9-3.25 mm. Costal index 0.55-0.56; costal ratios 4.3-5.0:2.8-3.5:1; costal cilia 0.09 mm long. With seven bristles on axillary ridge. Membrane lightly tinged yellowish. Haltere whitish-yellow.

FEMALE. Larger, body length 4.45-5.0 mm. Head similar to male. Third antennal segment a little smaller. Thorax as in male. Abdomen with terga coloured and haired as in male, except tergum VI, its length 2 times sa its width. Tergum V not chitinized. Venter greyish brown with widened field of hairs on segments III-VI. Sternum VII very narrow, stripe-like, slightly broaden apically. Legs similar ones of male, except inner face of hind femur without long hairs basally. Wings 3.25 mm.Costal index 0.56; costal ratios 5.6:3.6:1. Haltere yellow.



Figs 35-45. *Anevrina*, male. 35) *A. thoracica*, external face of hind femur; 36) *A. curvinervis*, inner face of hind femur; 37) *A. capillata*, inner face of hind femur; 38-41) anterior face of hind tibia: 38) *A. thoracica*, 39) *A. curvinervis*, 40) *A. capillata*, 41) *A. unispinosa*; 42-45) hypopygium, left side: 42) *A. thoracica*, 43) *A. curvinervis*, 44) *A. capillata*, 45) *A. unispinosa*. Scale=0.1 mm.

MATERIAL. Holotype –  $\sigma$ , Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 17.VI 1996 (MM). Paratypes – the same locality, 13.V, 17.VI 1996,  $8\sigma$ , 19 (MM).  $3\sigma$  and 19 was dissected for the study of details.

DISTRIBUTION. Russia: Primorskii krai.

ETYMOLOGY. The name refers to the hairson inner face of hind femur in male.

REMARKS. In Brown (1994) the male of *A. capillata* sp. n. runs to couplet 9. *A. capillata* sp. n. is easily distinguished from *A. urbana* (Meigen, 1830) and other species of *Anevrina* by very long hairs on inner face of hind femur basally.

#### Anevrina curvinervis (Becker, 1901)

Figs 36, 39, 43

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 17.VII 1996, 13 (MM).

DISTRIBUTION. Russia: Primorskii krai (new record). - Europe, North America.

#### Anevrina thoracica (Meigen, 1804)

Figs 35, 38, 42

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 13.V, 20-23.V 1996, 3♂, 2♀ (MM).

DISTRIBUTION. Russia: Primorskii krai (new record). - Europe, North America.

## Anevrina unispinosa (Zetterstedt, 1860)

Figs 41, 45

MATERIAL. Russia: Primorskii krai, 18 km SE Ussuryisk, Gornotayozhnoe, 14-17.VI, 18, 25-30.VII 1996, 177 ♂, 4 ♀ (MM).

DISTRIBUTION. Russia: Primorskii krai. - Europe, Japan.

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